

ATTACHMENT 1

1 CLEMENT SETH ROBERTS (STATE BAR NO. 209203)
croberts@orrick.com
2 BAS DE BLANK (STATE BAR NO. 191487)
basdeblank@orrick.com
3 ALYSSA CARIDIS (STATE BAR NO. 260103)
acaridis@orrick.com
4 EVAN D. BREWER (STATE BAR NO. 304411)
ebrewer@orrick.com
5 ORRICK, HERRINGTON & SUTCLIFFE LLP
The Orrick Building
6 405 Howard Street
San Francisco, CA 94105-2669
7 Telephone: +1 415 773 5700
Facsimile: +1 415 773 5759
8

9 SEAN M. SULLIVAN (admitted *pro hac vice*)
sullivan@ls3ip.com
10 COLE RICHTER (admitted *pro hac vice*)
richter@ls3ip.com
11 LEE SULLIVAN SHEA & SMITH LLP
656 W Randolph St., Floor 5W
Chicago, IL 60661
12 Telephone: +1 312 754 0002
Facsimile: +1 312 754 0003
13

14 *Attorneys for Sonos, Inc.*

15
16 UNITED STATES DISTRICT COURT
17 NORTHERN DISTRICT OF CALIFORNIA
18 SAN FRANCISCO DIVISION

19 GOOGLE LLC,
20 Plaintiff and Counter-defendant,
21 v.
22 SONOS, INC.,
23 Defendant and Counter-claimant.
24
25
26
27
28

Case No. 3:20-cv-06754-WHA
Related to Case No. 3:21-cv-07559-WHA

**SONOS'S MOTION FOR SUMMARY
JUDGMENT OF INFRINGEMENT OF
'885 PATENT CLAIM 1**

Date: June 9, 2022
Time: 8:00 a.m.
Place: Courtroom 12, 19th Floor
Judge: Hon. William Alsup

Complaint Filed: September 28, 2020

NOTICE OF MOTION

TO ALL PARTIES AND THEIR ATTORNEYS:

PLEASE TAKE NOTICE that on June 9, 2022 at 8:00 a.m., or as soon thereafter as may be heard before the Honorable Judge William Alsup in Courtroom 12 on the 19th Floor of the United States District Court for the Northern District of California, San Francisco Courthouse, 450 Golden Gate Avenue, San Francisco, CA 94102, Defendant Sonos, Inc (“Sonos”) will, and hereby does, move this Court for an Order granting summary judgment of infringement in favor of Sonos that Plaintiff Google LLC (“Google”) has infringed (and continues to infringe) Claim 1 of U.S. Patent No. 10,848,885 (the “’885 Patent”). This motion is based on this Notice of Motion, the accompanying Memorandum of Points and Authorities and exhibits thereto, the Declaration of Dr. Kevin C. Almeroth, all documents in the Court’s file, and such other written or oral evidence and argument as may be presented.

TABLE OF CONTENTS

| | Page(s) |
|--|----------------|
| I. INTRODUCTION | 1 |
| II. BACKGROUND | 2 |
| A. Sonos’s ’885 Patent | 2 |
| B. The Accused Google Players | 3 |
| III. LEGAL STANDARD | 7 |
| IV. ARGUMENT..... | 8 |
| A. A Google Speaker Group Is A Claimed “Zone Scene” | 8 |
| B. The Accused Google Players Meet Each Limitation of Claim 1 | 11 |
| 1. Limitation 1.0 (Preamble)..... | 11 |
| 2. Limitation 1.1..... | 12 |
| 3. Limitation 1.2..... | 13 |
| 4. Limitations 1.3-1.4..... | 13 |
| 5. Limitations 1.5-1.7..... | 14 |
| 6. Limitation 1.8..... | 18 |
| 7. Limitation 1.9..... | 20 |
| 8. Limitation 1.10..... | 22 |
| C. Google Has Committed Acts of Direct Infringement in the United States | 25 |
| V. CONCLUSION | 25 |

TABLE OF AUTHORITIES**Page(s)****Cases**

| | |
|--|----|
| <i>Anderson v. Liberty Lobby, Inc.</i> , 477 U.S. 242 (1986)..... | 7 |
| <i>Finjan, Inc. v. Secure Computing Corp.</i> , 626 F.3d 1197 (Fed. Cir. 2010)..... | 11 |
| <i>SmithKline Diagnostics, Inc. v. Helena Lab'ys Corp.</i> , 859 F.2d 878 (Fed. Cir. 1988)..... | 8 |
| <i>U.S. Surgical Corp. v. Ethicon, Inc.</i> , 103 F.3d 1554 (Fed. Cir. 1997)..... | 8 |
| <i>Vivid Techs., Inc. v. Am. Sci. & Eng'g, Inc.</i> , 200 F.3d 795 (Fed. Cir. 1999)..... | 11 |

Statutes

| | |
|-------------------------|----|
| U.S. Code § 271(a)..... | 25 |
|-------------------------|----|

Other Authorities

| | |
|----------------------------|------|
| Fed. R. Civ. P. 56(a)..... | 1, 7 |
|----------------------------|------|

STATEMENT OF THE RELIEF REQUESTED

Pursuant to Fed. R. Civ. P. 56(a) and the Court’s Patent Showdown Scheduling Order (D.I. 68, ¶ 4), Sonos requests the Court issue an Order that Google directly infringes Claim 1 of the ’885 Patent because Google makes, uses, offers to sell, sells, and/or imports into the United States infringing media players, specifically the Home Mini, Nest Mini, Home, Home Max, Nest Audio, Nest Hub (formerly branded Home Hub), Nest Hub Max, Nest Wifi Point, Chromecast, Chromecast Ultra, and Chromecast with Google TV (collectively, “Accused Google Players”).

MEMORANDUM OF POINTS AND AUTHORITIES

I. INTRODUCTION

Sonos established the market for wireless multiroom audio systems. Sonos’s pioneering technology allows consumers to easily set up and use networked audio players, now commonly referred to as “smart speakers,” in multiple locations around their home. For example, with Sonos’s technology, a consumer might have smart speakers in their living room, kitchen, and bedroom, which can be controlled using a smart phone or other computer. Utilizing “controller” software on those devices, a user can play different music on each speaker, or group certain speakers together to play the same music in synchrony.

Sonos launched its first product in early 2005. It dominated the wireless multiroom audio system market for nearly a decade. In late 2015, Google entered the market. Having studied Sonos’s products, and using Sonos’s patented inventions, Google began selling its own competing multiroom audio players. In an effort to gain entry into as many households as possible, Google priced its players at or below cost. It was aided in its ability to sell its products at bargain-basement prices, by the fact that it refused to license Sonos’s patents on reasonable terms. Google then used its heavily discounted players to promote and gain market share for its revenue-generating streaming apps (and vice versa), like Google Play Music and YouTube Music.

This motion is about Google’s infringement of one of Sonos’s patented inventions, U.S. Patent No. 10,848,885 titled “Zone Scene Management” (attached hereto as Ex. A¹). Sonos’s ’885

¹ All exhibits cited herein are attached to the Declaration of John D. Smith III in Support of Sonos’s Motion for Summary Judgment filed concurrently herewith.

Patent is directed to Sonos’s “zone scene” technology. This technology allows a user to create and save predefined groups of audio players that are stored by the players and invoked later on to play music in synchrony. Each of the Accused Google Players directly infringes Claim 1 of the ’885 Patent and the Court should, therefore, grant summary judgment of infringement as to that claim.

II. BACKGROUND

A. Sonos’s ’885 Patent

The ’885 Patent is directed to Sonos’s “zone scene” technology, which, at the time of the invention, provided a new way of organizing and using networked media players such as smart speakers, which are referred to in the patent as “zone players.” The technology disclosed in the ’885 Patent enables a user to create and save a predefined group of “zone players” that can *later* be invoked to cause the “zone players” in the previously-saved, predefined group to become configured to play back audio in synchrony. The ’885 Patent calls such a previously-saved, predefined group a “zone scene” and explains that multiple “zone scenes” can be created in a single networked playback system.

Figure 1 of the ’885 Patent is an example of a networked playback system in which the “zone scene” technology can be used. The exemplary system includes “zone players” 102, 104, 106 and “controlling devices” 140, 142 coupled to a “data network” 108 (e.g., a home Wi-Fi network). ’885 Patent at Fig. 1, 4:39-5:2, 6:28-30. The ’885 Patent explains that, in addition to communicating with each other and with other devices on “data network” 108, each “zone player” is configured to communicate over a “wide area network” (e.g., the Internet) with one or more remote audio sources (e.g., an Internet-based audio source like Spotify or YouTube Music) to, for example, retrieve audio for playback on one or more “zone players” in the system. *See, e.g., id.* at 4:66-5:9, FIG. 1.

Before the ’885 Patent, conventional multi-speaker systems were inflexible and cumbersome to use. Some were essentially “a collection of many stereo systems” each with its own local audio source, making it “difficult” to share music across different areas of the home. *Id.* at 1:53-55. Other systems offered a central source of music connected to speakers located in different rooms in the home, but these components were physically “hard-wired” together using

1 conventional stereo wires. *Id.* at 1:62-65. That made it difficult, if not impossible, to rearrange the
 2 system to suit different user preferences.

3 Take, for example, a user who likes to listen to the news in the morning. They have speakers
 4 in different rooms of their house. This person might want to listen to the morning news while
 5 getting ready for work by playing the news on speakers in their bedroom, bathroom, and den. *Id.*
 6 at 1:65-2:3. But the same person might want to listen to music (e.g., jazz) after dinner in the evening
 7 by playing an album in their den and living room. *Id.* at 2:3-5. The two desired groups in this
 8 example are *different*, but both include the den. Using existing audio systems, it was “difficult ...
 9 to accommodate the requirement of dynamically managing the ad hoc creation and deletion of
 10 groups” because those systems were hard-wired and pre-configured. *Id.* at 2:15-17.

11 Sonos’s ’885 Patent solved this problem by allowing users to create different groupings of
 12 smart speakers that were durable in the sense that the system could remember the groups, but easy
 13 to use in the sense that they could be selected for invocation by a user at any time. *See, e.g., id.* at
 14 3:14-31, 8:47-61, 10:30-11:5. In this way, a user could use a networked controller to predefine
 15 different, customized groupings of smart speakers called “zone scenes,” and easily start listening
 16 to music synchronously on any of them.

17 Claim 1 of the ’885 Patent covers aspects of Sonos’s “zone scene” technology from the
 18 perspective of one of the players that is capable of operating in a “zone scene.”

19 **B. The Accused Google Players**

20 All the Accused Google Players are wireless media players that incorporate Google’s “Cast”
 21 (or sometimes called “Chromecast”) technology, which enables the Accused Google Players to
 22 utilize Google’s “Cast Protocol” to communicate with smartphones, tablets, or other computer
 23 devices installed with Cast-enabled apps, such as Google’s Google Home app, Google’s Google
 24 Play Music app², and Google’s YouTube Music app. *See, e.g.,* Ex. B, at 9-11; Ex. C, at GOOG-
 25 SONOSWDTX-00005793, 802. These Cast-enabled apps help facilitate setup and/or control of
 26

27
 28 ² Because of its move to YouTube Music, Google discontinued the Google Play Music app in late 2020.

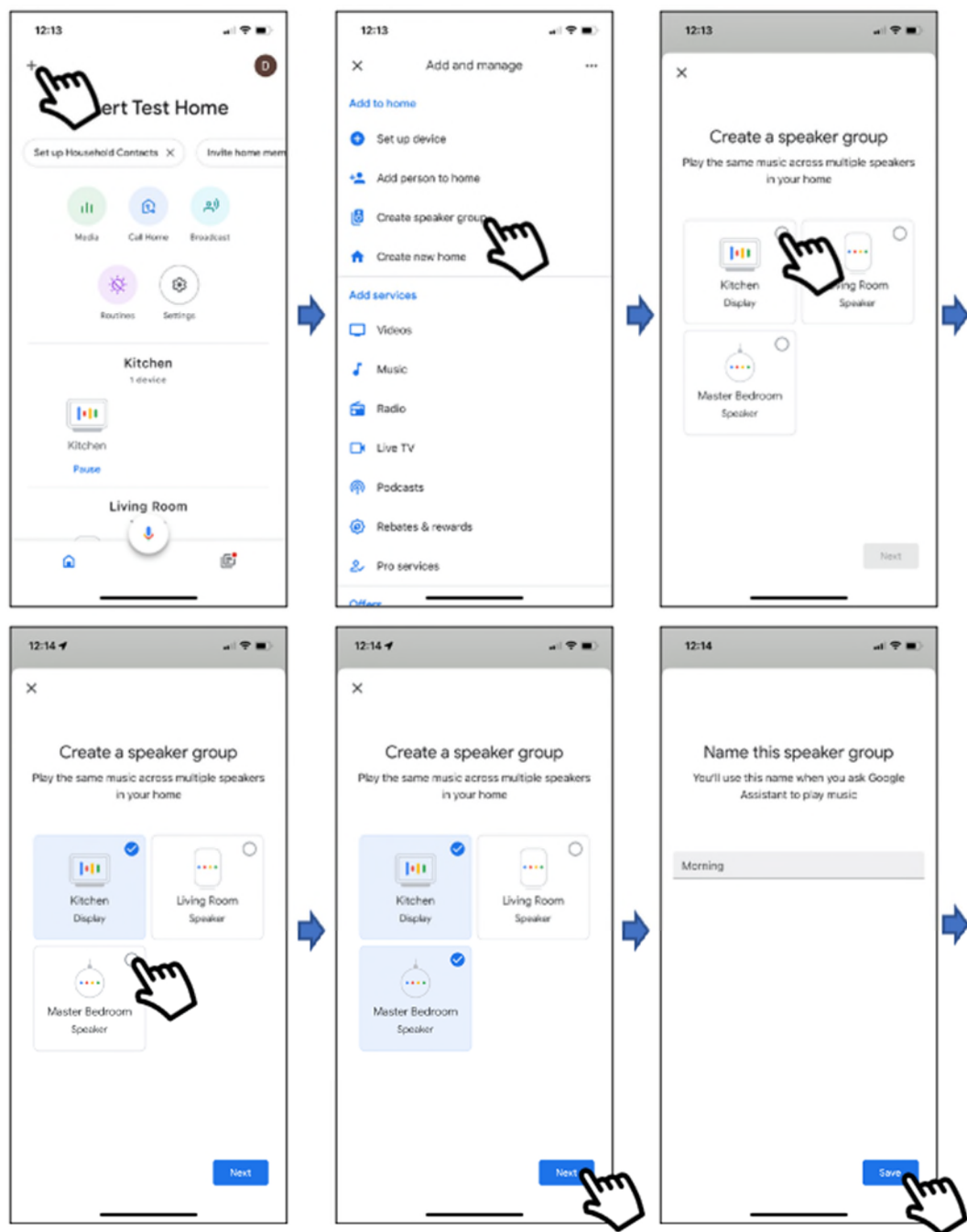
1 the Accused Google Players, including the creation and use of groups of those players. Herein, a
 2 computer device (e.g., smartphone, tablet, or laptop) installed with any one or more of these Cast-
 3 enabled apps is referred to as a “Google Controller.”

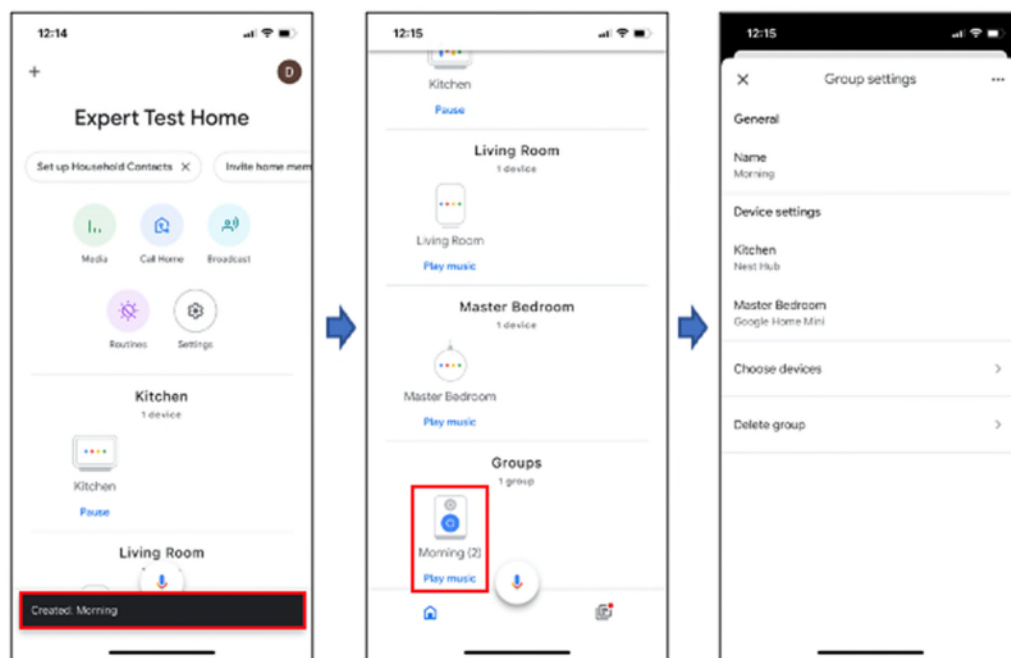
4 Google’s Cast technology enables each Accused Google Player to operate in one of two
 5 mutually exclusive modes at any given time (and to transition between the two modes), namely,
 6 (1) a mode in which the Accused Google Players are configured to play back audio individually
 7 (referred to internally by Google as a “standalone” or “non-group” mode) or (2) a mode in which
 8 the Accused Google Players are configured to play back media in synchrony with one or more other
 9 Accused Google Players as part of a group (referred to internally by Google as a “multizone” or
 10 “multiroom” grouped mode). *See, e.g.*, Ex. D, at GOOG-SONOSWDTX-00048747 (referring to a
 11 “non-group” mode as a “standalone” mode); Ex. C, at GOOG-SONOSWDTX-00005793
 12 (describing how to listen to music on an Accused Google Player that is operating in standalone
 13 mode); Ex. E, at GOOG-SONOSWDTX-00007068 (“Group any combination of Google Nest or
 14 Google Home speakers and displays and Chromecast devices together for synchronous music
 15 throughout the home.”); Ex. F, at GOOG-SONOSWDTX-00040385 (document titled “Multizone
 16 Audio Design” stating “[t]he primary goal of multiroom audio is to play out the audio in sync across
 17 all the devices in a group”); Declaration of Dr. Kevin C. Almeroth in Support of Sonos’s Motion
 18 for Summary Judgment (“Almeroth Decl.”), at ¶ 32, 112-115, 117-120.

19 One type of group supported by Google’s Cast technology is a “speaker group” (also
 20 referred to as a “static” group), which is a grouping of Accused Google Players for synchronous
 21 playback that is predefined by a user and saved for future use. To facilitate the creation and control
 22 of a speaker group, Google provides a free software application called the Google Home app, which
 23 can be installed on a user’s personal computer device, typically a smartphone. According to
 24 Google, the Google Home app allows a user to create and save speaker groups. Ex. E, at GOOG-
 25 SONOSWDTX-00007068; Ex. G, at GOOG-SONOSWDTX-00048962-65. Then, *after* a speaker
 26 group is created and saved, a user can cause a previously-saved, predefined speaker group to be
 27 invoked (or “launched” in Google’s terms) at any time for synchronous playback by selecting the
 28 group via a Google Controller using either the Google Home app itself or other Cast-enabled media

content streaming apps, such as Google's Google Play Music app and Google's YouTube Music app. *Id.*; Almeroth Decl., at ¶ 34, 59-69, 129-161.

The screenshots below from Sonos's expert Dr. Kevin C. Almeroth's testing of the Accused Google Players illustrate how a user can use a Google Controller, such as a smartphone installed with the Google Home app, to create and save a new speaker group named "Morning" that includes two Accused Google Players: (1) a Nest Hub player named "Kitchen," (2) and a Home Mini player named "Master Bedroom":





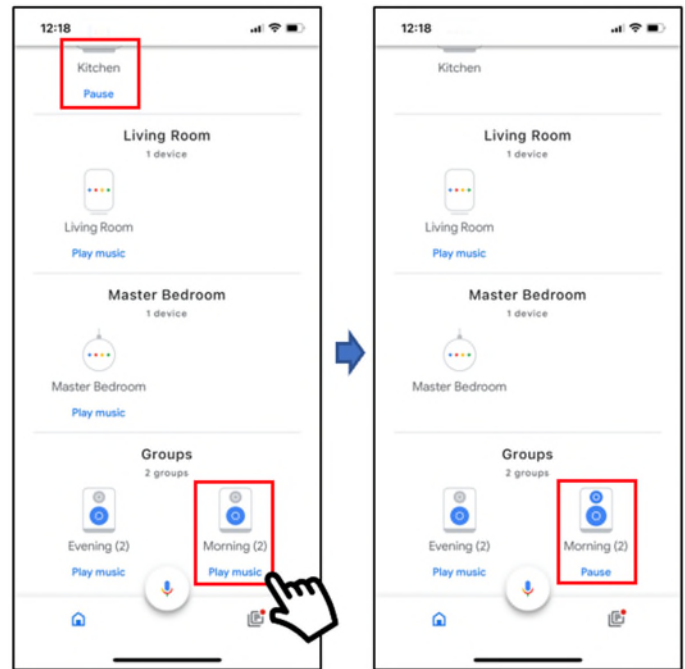
Almeroth Decl., at ¶ 48. This process for creating and saving a speaker group can also be viewed in the Google marketing video titled “How to create a Speaker Group” at https://www.youtube.com/watch?v=ek_hgt5i5ec.

A user can create, save, and name as many speaker groups as desired, including groups that have one or more overlapping Accused Google Players. *See* Almeroth Decl., at ¶ 35, 48-49, 51, 58, 121-127. For example, in the Google playback system illustrated in Dr. Almeroth’s testing screenshots above, a user could create another speaker group named “Afternoon” that includes the Nest Hub player named “Kitchen” (which is already in the “Morning” group) and the Nest Audio player named “Living Room.” Dr. Almeroth observed just that during his testing. *Id.* at ¶ 35, 48-49. A user also has the flexibility to name the speaker group anything. For example, instead of using a time of day, the user can name the group according to an area in the house (e.g., “first floor”), a person’s name (e.g., “Bob”), among other possibilities. *Id.* at ¶ 52, 85-88.

The act of creating and saving a new speaker group does *not* change the operating mode of the Accused Google Players that are added to the speaker group. *Id.* at ¶ 50, 57, 119, 129-135. In other words, if an Accused Google Player is operating in standalone mode at the time it receives an indication that it has been added to a new speaker group, the Accused Google Player

will continue to operate in standalone mode (as opposed to transitioning into grouped mode) until that speaker group is subsequently selected for launch at a Google Controller.

Take for instance Dr. Almeroth's "Morning" group. As shown in the Google Home app screenshots on the right, after creating and saving the "Morning" group, a user can cause that group to be launched for synchronous playback by selecting the "Play music" button below the "Morning" group icon. *Id.* at ¶ 61. The user interface indicates that the group has started playing music by replacing the "Play music" with the



"Pause" button. *Id.* As shown and described in Dr. Almeroth's Declaration, a previously-saved, predefined speaker group can also be selected for launch via the Cast menu of Google's Google Play Music app and Google's YouTube Music app. *Id.* at ¶ 59-60, 62-63.³

III. LEGAL STANDARD

Summary judgment is proper where the pleadings, discovery, and affidavits show that there is "no genuine dispute as to any material fact and [that] the movant is entitled to judgment as a matter of law." Fed. R. Civ. P. 56(a). Only disputes over material facts will preclude summary judgment—"[f]actual disputes that are irrelevant or unnecessary will not be counted." *Anderson v. Liberty Lobby, Inc.*, 477 U.S. 242, 248 (1986). Summary judgment of infringement is proper when "every limitation of the patent claims asserted to be infringed is found in the accused device, either

³ The relevant player-side Cast technology described herein has not meaningfully changed since the start of the infringement period, and is the same across all Accused Google Players. *See* Ex. H, at 11-13 (Google setting forth a chart of firmware versions for the Accused Google Players); Almeroth Decl., at ¶ 39, 42; *see also id.* at 41, 56.

literally or by an equivalent.” *SmithKline Diagnostics, Inc. v. Helena Lab’ys Corp.*, 859 F.2d 878, 889 (Fed. Cir. 1988).

IV. ARGUMENT

Each Accused Google Player meets each limitation of Claim 1 of the ’885 Patent. This is true under both parties’ proposed claim constructions. The Court need not resolve any claim construction disputes to grant this motion. *Cf. U.S. Surgical Corp. v. Ethicon, Inc.*, 103 F.3d 1554, 1568 (Fed. Cir. 1997) (upholding verdict of obviousness because claims were obvious under either parties’ interpretation of the claims).

Below is an analysis of each claim limitation, grouping certain related limitations together to make the analysis easier to follow. We are also submitting a declaration from Dr. Almeroth, who walks through each claim limitation with an additional level of technical and evidentiary detail. However, before addressing each limitation individually, Sonos addresses the threshold issue of whether a Google speaker group is a “zone scene,” as that term is used throughout Claim 1 of the ’885 Patent.

A. A Google Speaker Group Is A Claimed “Zone Scene”

Claim 1 of the ’885 Patent includes several limitations that require functionality related to a “zone scene.” *E.g.*, limitations 1.6, 1.7, 1.9. The parties dispute the construction of “zone scene,” but that dispute is irrelevant to infringement because a Google speaker group infringes under either party’s position. Sonos proposes a construction that tracks the definition of “zone scene” set forth by the claim language, namely, “a previously-saved grouping of zone players that are to be configured for synchronous playback of media when the zone scene is invoked.” *See* D.I. 126, App. A at 27. Google is advocating for the construction “a previously saved grouping of zone players according to a common theme.” *Id.*

The parties agree on the first half of the construction: a “zone scene” is a “previously-saved group[] of zone players.” This is indisputably met by Google’s speaker groups. As explained above in Section II.B., a Google speaker group is a selection of Accused Google Players (each of which is a “zone player” as discussed below) which a user names and then saves for future use. This is confirmed by the evidence. For instance, Google’s website includes a help page for the

1 Accused Google Players entitled “Create and manage speaker groups,” which explains that a
 2 Google speaker group allows a user to “[g]roup any combination of Google Nest or Home speakers
 3 and displays and Chromecast devices together for synchronous music throughout the home” and
 4 provides instructions for creating a speaker group via a Google Controller that concludes with the
 5 user entering a “name” for the speaker group and then selecting a “Save” option in order to save
 6 the speaker group for future use. *See* Ex. E, at GOOG-SONOSWDTX-00007068. Similarly, an
 7 internal Google document entitled “Multizone - cast_shell integration” explains that a speaker
 8 group of Accused Google Players is represented by a “group uuid” and a “group name” of the
 9 speaker group that is “stored in [a] prefs file” on each Accused Google Player in the speaker group.
 10 Ex. G, at GOOG-SONOSWDTX-00048962-65; *see also* Ex. B, at 9-11 (Google explaining that a
 11 speaker group is one that is “created in the Google Home App before media starts playing,” and
 12 that “[i]f a group has been created, the devices in the group use a record of the group name and its
 13 unique identifier, which may be referred to as being in a prefs file”). As a result, a Google speaker
 14 group is “a previously-saved group of zone players” and satisfies the first half of both parties’
 15 proposed constructions. *See* Almeroth Decl., at ¶ 77-83.

16 A Google speaker group also satisfies the second half of Sonos’s proposed construction
 17 (which merely tracks the express claim language) because a Google speaker group is “configured
 18 for synchronous playback of media when the zone scene is invoked.” *Id.* For example, Google’s
 19 “Multizone - cast_shell integration” document explains that after being created and saved, a speaker
 20 group becomes available for “casting,” but is not invoked until the speaker group is selected for
 21 launch at a Google Controller. *See* Ex. G, at GOOG-SONOSWDTX-00048962-65; *see also* Ex. F,
 22 at GOOG-SONOSWDTX-00040384-89 (describing the separate processes for
 23 “[c]reating/configuring a group” and then subsequently “[c]asting to a group” that has previously
 24 been created in order to invoke that speaker group); Ex. I, at GOOG-SONOSNDCA-00056756, 58,
 25 61 (confirming that speaker groups are predefined groupings of Cast-enabled audio players for
 26 synchronous playback that can have overlapping members and are not launched at the time of
 27 creation).

As discussed above in Section II.B., Dr. Almeroth’s testing confirmed that a Google speaker group is a grouping of Accused Google Players that is created and saved by a user for future use, and that the Accused Google Players included in the speaker group are not configured for synchronous audio playback unless and until the speaker group is **launched** at a user’s request. *See* Almeroth Decl., at ¶ 48-67.

The foregoing evidence clearly establishes that a Google speaker group is a “zone scene” under Sonos’s interpretation.

But this evidence also establishes that a Google speaker group satisfies the second half of Google’s proposed construction. In particular, Google has interpreted the phrase “according to a common theme” in its proposed construction to impose a requirement that the “zone scene” include some kind of “‘theme’ information” (also referred to by Google as “thematic information”). *See, e.g., Sonos, Inc. v. Google LLC*, No. 3:21-cv-07559-WHA (“*Sonos 7559*”), D.I. 64 at 12-15.⁴ For example, Google has identified names reflecting a specific time of day (e.g., “morning” and “afternoon”) and names reflecting a specific area of a user’s home (e.g., “garden”) as “theme” information that would satisfy the “according to a common theme” aspect of Google’s proposed construction. *Id.*⁵

Google’s Cast technology indisputably provides users with the capability to define *any* desired name for a speaker group – including the exact same kinds of time-based or area-based names that Google has acknowledged to be “theme” information. For instance, as shown in Dr. Almeroth’s testing, Google’s Cast technology allows for speaker groups that are named according to a specific time of day, such as a “Morning” speaker group comprising Accused Google Players for listening to audio in synchrony in the morning or an “Afternoon” speaker group comprising

⁴ Herein, citations to No. 3:21-cv-07559-WHA identify documents that were originally filed in No. 6:20-cv-881-ADA (W.D. Tex.), which was transferred to this Court.

⁵ Although not clear, to the extent Google asserts that only these specific types of names constitute “theme” information, Sonos does not agree with such a narrow interpretation of the word “theme.” Neither Claim 1 nor the specification of the ’885 Patent restricts the types of names that may be used to identify a zone scene, and the plain and ordinary meaning of “theme” is not as narrow as Google’s argument assumes. *See* Almeroth Decl., at ¶ 84.

different or overlapping Accused Google Players for listening to audio in synchrony in the afternoon. *See* Almeroth Decl., at ¶ 48-49, 52, 86-87. As another possibility, Google’s Cast technology allows for speaker groups that are named according to a specific area of the user’s home where the grouped Accused Google Players are located, such as an “Upstairs” speaker group, a “Downstairs” speaker group, or an “Outside” speaker group. *See, e.g.,* Ex. I, at GOOG-SONOSNDCA-00056756 (illustrating an example of a Google speaker group named “1st floor”); Ex. J, at SONOS-SVG2-00067574 (describing examples of speaker groups named “upstairs,” “downstairs,” and “deck”); Ex. K, at GOOG-SONOSNDCA-00057440 (listing “Bedroom speakers” as an example of a Google speaker group); Almeroth Decl., at ¶ 52, 86-87. At a minimum, these examples of Google speaker groups are “according to a common theme” by Google’s own prior admission.

Because the claim is directed to a “zone player” with software that is *capable* of enabling the zone player to be included in a “zone scene” (that can be invoked for synchronous playback), the *capability* of the Accused Google Players to be included in Google speaker groups (that can be invoked for synchronous playback) having time-based or area-based names is itself sufficient to establish infringement. *See Finjan, Inc. v. Secure Computing Corp.*, 626 F.3d 1197, 1204-05 (Fed. Cir. 2010); *see also* Almeroth Decl., at ¶ 89. Any *additional* capability related to speaker groups with allegedly non-thematic names is irrelevant. *Vivid Techs., Inc. v. Am. Sci. & Eng’g, Inc.*, 200 F.3d 795, 811 (Fed. Cir. 1999) (“[I]nfringement is not avoided by the presence of elements or steps in addition to those specifically recited in the claim.”); *see also* Almeroth Decl., at ¶ 89.

Accordingly, a Google speaker group is a “zone scene” under either party’s position.

B. The Accused Google Players Meet Each Limitation of Claim 1

1. Limitation 1.0 (Preamble)

Limitation 1.0 recites “a first zone player.” Sonos contends that “zone player” is properly construed to mean a “data network device configured to process and output audio,”⁶ while Google

⁶ The same construction of “zone player” that Google agreed to in the prior ITC investigation between the parties. *See* D.I. 185-6 at 15.

1 contends that “zone player” be given its “plain and ordinary meaning,” and that no construction is
 2 necessary. *See* D.I. 184 at 5-8; D.I. 200 at 7-11. In this respect, Google appears to agree that a
 3 “zone player” is a device configured to “output audio,” but disputes that a “zone player” is restricted
 4 to a “data network device” or a device that is “configured to process . . . audio.” *Id.* Each Accused
 5 Google Player meets either construction.

6 As an initial matter, there is no dispute that each Accused Google Player is “configured to
 7 . . . output audio” either in the form of sound from built-in speakers or in the form of an audio signal
 8 that is provided to a connected, external device with speakers, such as a TV. *See* Ex. L, at 9 (Google
 9 admitting that each of the Accused Google Players “can output audio either (i) in the form of sound
 10 waves from one or more integrated speakers and/or (ii) in the form of an audio signal that is
 11 provided to a device connected to the [Accused Google Player]”); *see also* Almeroth Decl., at ¶ 96-
 12 97. Thus, each Accused Google Player satisfies the “output audio” part of Sonos’s construction
 13 and is a “first zone player” under Google’s proposed interpretation of “zone player.”

14 In addition, each Accused Google Player satisfies the additional aspects of Sonos’s
 15 proposed construction of “zone player.” For instance, it is undisputed that each Accused Google
 16 Player can connect to and communicate over a Wi-Fi network, which is commonly understood by
 17 POSITAs to be a “data network” because it serves as “a medium that interconnects devices,
 18 enabling them to send digital data packets to and receive digital data packets from each other.” *See*
 19 Ex. L, at 13 (Google admitting that each Accused Google Player “may interface with a Wi-Fi
 20 network”); Almeroth Decl., at ¶ 99. Thus, each Accused Google Player is a “data network device.”
 21 Further, each Accused Google Player indisputably has the capability to “process . . . audio.” *See*,
 22 e.g., Ex. M, at GOOG-SONOSWDTX-00051153 (describing “3 stages of processing” audio); Ex.
 23 D, at GOOG-SONOSWDTX-00048738 (describing processing audio via “decoding . . . codecs”);
 24 Almeroth Decl., at ¶ 100. Consequently, each Accused Google Player is also a “first zone player”
 25 under Sonos’s proposed construction of “zone scene.”

26 **2. Limitation 1.1**

27 Limitation 1.1 requires the “first zone player” to have “a network interface that is configured
 28 to communicatively couple the first zone player to at least one data network.” Sonos contends that

“network interface” be given its “plain and ordinary meaning,” which requires a “physical component of a device that provides an interconnection with a data network.”⁷ *See* D.I. 126, App. A at 23. Google argues for a different “plain and ordinary meaning” that does not have to be a “physical” component and does not have to provide an interconnection with “a data network.” *Id.*; *Sonos 7559*, D.I. 64 at 4-5; *Sonos 7559*, D.I. 81 at 2 n.2. Under either interpretation, each Accused Google Player includes a “network interface.”

As an initial matter, Google admits that each Accused Google Player “may interface with a Wi-Fi network,” which necessarily means that each Accused Google Player has a “network interface.” *See* Ex. L, at 13; *see also* Almeroth Decl., at ¶ 108. Additionally, in the prior ITC investigation involving the parties, one of Google’s 30(b)(6) witnesses admitted that “all cast devices have a network interface.” *See* Ex. N, at 224:1-24; *see also* Almeroth Decl., at ¶ 108.

3. Limitation 1.2

Limitation 1.2 requires the “first zone player” to have “one or more processors.” Google admits that each Accused Google Player “includes at least one processor” and thus meets this limitation. *See* Ex. L, at 7; *see also* Almeroth Decl., at ¶ 109.

4. Limitations 1.3-1.4

Limitations 1.3-1.4 require the “first zone player” to have “a non-transitory computer-readable medium; and program instructions stored on the non-transitory computer-readable medium that, when executed by the one or more processors, cause the first zone player to perform functions comprising.” Google admits that each Accused Google Player “includes memory that can store computer program instructions, such as Flash memory and/or ROM.” *See* Ex. L, at 7; *see also* Almeroth Decl., at ¶ 110. Moreover, such memory is installed with firmware (sometimes referred to by Google as “Cast firmware”) for performing the claimed functions discussed below. *See* Ex. H, at 11-13 (Google setting forth a chart of firmware versions for the Accused Google

⁷ The same construction of “network interface” that Google agreed to in the prior ITC investigation between the parties. *See* D.I. 185-6 at 15.

Players); Ex. O, at 67:22-71:1 (Google testimony that the Accused Google Players are sold with “code loaded onto those players that supports multiroom features”); Almeroth Decl., at ¶ 110.

5. Limitations 1.5-1.7

Limitations 1.5-1.7 recite:

[1.5] while operating in a standalone mode in which the first zone player is configured to play back media individually in a networked media playback system comprising the first zone player and at least two other zone players:

[1.6] (i) receiving, from a network device over a data network, a first indication that the first zone player has been added to a first zone scene comprising a first predefined grouping of zone players including at least the first zone player and a second zone player that are to be configured for synchronous playback of media when the first zone scene is invoked; and

[1.7] (ii) receiving, from the network device over the data network, a second indication that the first zone player has been added to a second zone scene comprising a second predefined grouping of zone players including at least the first zone player and a third zone player that are to be configured for synchronous playback of media when the second zone scene is invoked, wherein the second zone player is different than the third zone player[.]⁸

In order to meet these limitations, an Accused Google Player must be programmed with the functional capability to:

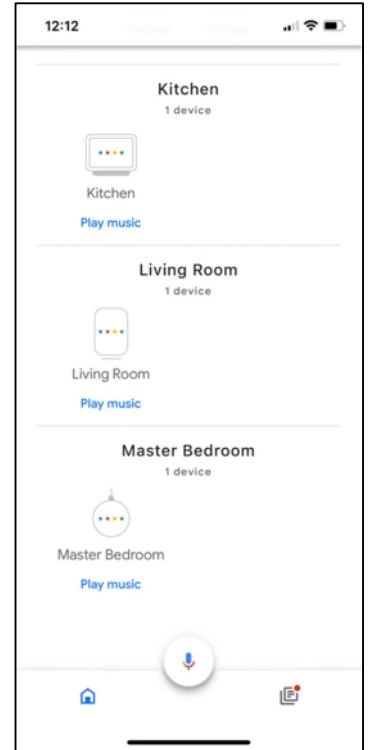
- Participate in a “networked media playback system” comprising the Accused Google Player and at least two other Accused Google Players;
- Operate in a “standalone mode” in which the Accused Google Player “is configured to play back media individually” while in the “networked media playback system”; and
- While operating in the “standalone mode,” receive, from a “network device” over a “data network,” (i) a “first indication” that the Accused Google Player has been added to a “first zone scene,” which zone scene includes the Accused Google Player and a second Accused Google Player and (ii) a “second indication” that the Accused Google Player has been added to a “second zone scene,” which zone scene includes the Accused Google Player and a third Accused Google Player that differs from the second Accused Google Player.

Each Accused Google Player is programmed with this capability.

Networked media playback system: As confirmed by Google’s own documents and

⁸ Neither party has asserted a construction of any term included in limitations 1.5-1.7 other than “zone player” and “zone scene,” which have already been addressed.

1 marketing materials, each Accused Google Player is capable of being
 2 placed into a “networked media playback system” with at least two
 3 other Accused Google Players. *See, e.g., Ex. I, at GOOG-*
 4 *SONOSNDCA-000056756 (illustrating a Google playback system*
 5 *with four Cast devices); Ex. E, at GOOG-SONOSWDTX-00007068*
 6 *(“Group any combination of Google Nest or Google Home speakers*
 7 *and displays and Chromecast devices together for synchronous music*
 8 *throughout the home.”); see also Almeroth Decl., at ¶ 116. As shown*
 9 *in the Google Home app screenshot to the right, this capability was*
 10 *also confirmed during Dr. Almeroth’s testing of a Google playback*
 11 *system that included a Nest Hub player named “Kitchen,” as well as*
 12 *two other Google media players, a Home Mini named “Master*
 13 *Bedroom” and a Nest Audio player named “Living Room.” See*
 14 *Almeroth Decl., at ¶ 42-46, 116.*



15 ***Standalone mode:*** As explained above in Section II.B., each Accused Google Player
 16 operates in one of two mutually-exclusive modes at any given time: (1) a “standalone” mode in
 17 which the Accused Google Player is configured to play back media individually or (2) a grouped
 18 mode in which the Accused Google Player is configured to output audio in synchrony with output
 19 of audio by one or more other Accused Google Player as part of a group. Thus, each Accused
 20 Google Player is programmed with the functional capability to operate in a “standalone mode” in
 21 which the Accused Google Player “is configured to play back media individually” (rather than as
 22 part of a group). *See Almeroth Decl., at ¶ 117-118.*⁹ In fact, this is the default operating mode for
 23 any Accused Google Player (e.g., after being initially set up on a Wi-Fi network), and an Accused
 24

⁹ While operating in standalone mode in which an Accused Google Player is configured to play back media individually, the Accused Google Player can either (i) be engaging in active playback of media (i.e., outputting audio in the form of sound from built-in speakers or outputting audio in the form of an audio signal that is provided to a connected device with speakers) or (ii) not be engaging in active playback of media content. *See Ex. L, at 8-9; Almeroth Decl., at ¶ 117-118.* Whether or not an Accused Google Player serving the role of the claimed “first zone player” is engaging in active playback does not affect the functional capability described herein.

1 Google Player will remain in “standalone mode” unless and until a speaker group that includes the
 2 Accused Google Player is created, saved, and then subsequently selected for launch via a Google
 3 Controller, at which point the Accused Google Player will transition from “standalone mode” to
 4 grouped mode, as explained more below with respect to limitations 1.8-1.10. *See* Almeroth Decl.,
 5 at ¶ 119.

6 This capability of each Accused Google Player to operate in “standalone mode” in which
 7 the Accused Google Player “is configured to play back media individually” is confirmed by
 8 Google’s documents and marketing materials. *See, e.g.,* Ex. D, at GOOG-SONOSWDTX-
 9 00048747 (referring to a “non-group” mode as a “standalone” mode); Ex. C, at GOOG-
 10 SONOSWDTX-00005793 (describing how to listen to music on an Accused Google Player
 11 operating in standalone mode); Ex. I, at GOOG-SONOSNDCA-00056748, 61 (describing various
 12 scenarios where a Cast-enabled player is operating in a standalone mode). This capability was also
 13 observed by Dr. Almeroth, when individual playback of media on the Nest Hub player named
 14 “Kitchen” was initiated via the Google Home app. *See* Almeroth Decl., at ¶ 47. Recall that Dr.
 15 Almeroth’s Google test system included three audio players named “Kitchen,” “Master Bedroom,”
 16 and “Living Room.” *Id.* After initiating playback on the Kitchen player, Dr. Almeroth observed
 17 that *only* that individual player was outputting sound – the Living Room and Master Bedroom
 18 players were silent. *Id.*

19 ***Receiving first and second indications:*** Each Accused Google Player is programmed such
 20 that, while operating in a “standalone mode” (e.g., after being initially set up on a Wi-Fi network),
 21 the Accused Google Player is capable of receiving “join_group” messages for any number of
 22 speaker groups from a Google Controller (the claimed “network device”) installed with the Google
 23 Home app over Wi-Fi, where each “join_group” message comprises an indication that the Accused
 24 Google Player has been added to a speaker group that is identified in the “join_group” message
 25 with a “group uuid” and a “group name” (i.e., the name assigned to the group by the user during
 26 creation). *See, e.g.,* Ex. B, at 9 (Google explaining that “[i]n the Google Home app, a user may
 27 select a specific device and add it to a group in Home app, which causes the Google Home app to
 28 send a join_group command to that device,” and that “[i]n the scenario where a user is configuring

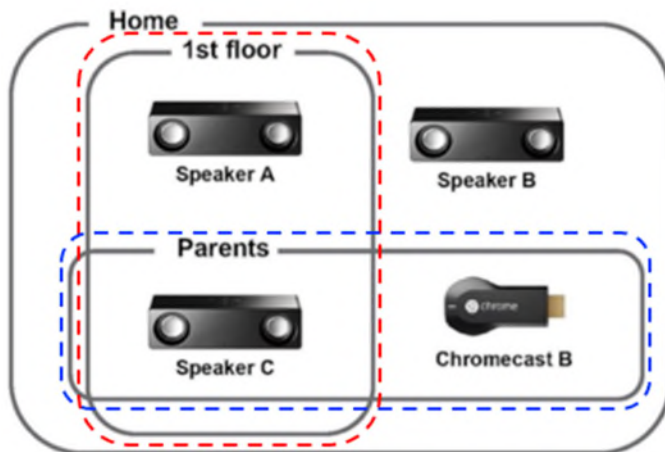
1 a new group of two players, both players may receive the join group command.”); Ex. G, at GOOG-
 2 SONOSWDTX-00048962 (explaining that a “join_group” serves to “add[] the target device to a
 3 multizone group” and showing that a “join_group” message includes a “group uuid” and a “group
 4 name” for a speaker group); Almeroth Decl., at ¶ 121-127. The “join_group” message for a speaker
 5 group is sent to the Accused Google Player after it has been added to the speaker group by the user
 6 via a Google Controller. *Id.* Therefore, each “join_group” message tells the Accused Google
 7 Player it has been added to a speaker group comprising the Accused Google Player and at least one
 8 other Accused Google Player added by the user – which is a “zone scene” as explained above. *Id.*

9 After the speaker group is created and saved, it can then later be selected for launch, which is the
 10 action that causes the Accused Google Players in the speaker group to become configured for
 11 synchronous playback of media, as explained below in connection with limitations 1.8-1.10.

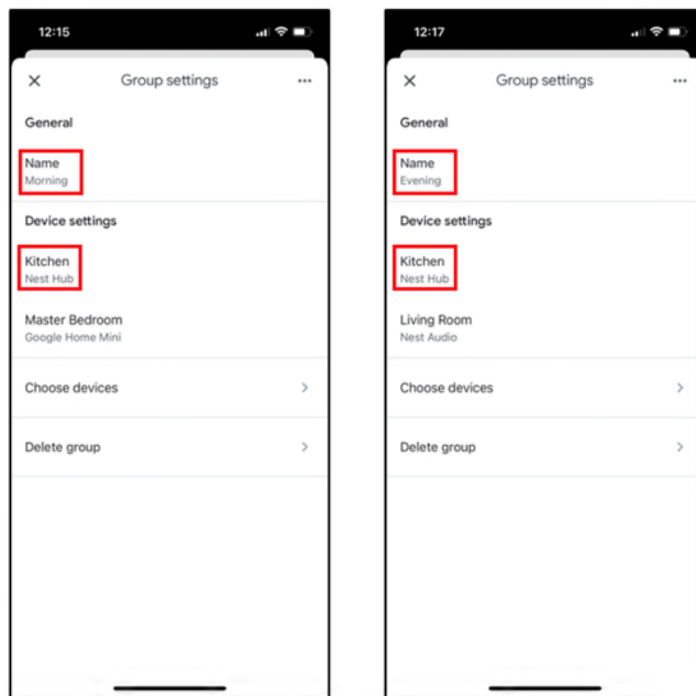
12 Accordingly, while operating in a “standalone mode,” each Accused Google Player is
 13 capable of receiving from a Google Controller over a Wi-Fi network (i) a first “join_group”
 14 message that serves as a “first indication” that the Accused Google Player “has been added” to a
 15 first speaker group (the claimed “first zone scene”), which includes the Accused Google Player and
 16 a second Accused Google Player that “are to be configured for synchronous playback of media
 17 when the first [speaker group] is invoked” and (ii) a second “join_group” message that serves as a
 18 “second indication” that the Accused Google Player “has been added” to a second speaker group
 19 (the claimed “second zone scene”), which includes the Accused Google Player and a third Accused
 20 Google Player (that is different from the second Accused Google Player) that “are to be configured
 21 for synchronous playback of media when the second [speaker group] is invoked.” *See* Almeroth
 22 Decl., at ¶ 121-127.

23 The capability of adding a single Accused Google Player to two different speaker groups in
 24 a Google playback system is illustrated in Google’s “Cast for Audio” specification, which includes
 25 the diagram shown on the right that has been annotated using dashed red and blue boxes. *See* Ex.
 26 I, at GOOG-SONOSNDCA-00056756 (also stating that each Cast receiver “can be a member of

several groups”). As shown in this diagram, a first Accused Google Player labeled “Speaker C” has been added to both (1) a “1st floor” speaker group (red box) that includes Speaker C and a second Accused Google Player labeled “Speaker A” and (2) a “Parents” speaker group (blue box) that includes Speaker C and a third Accused Google Player labeled “Chromecast B.”



Likewise, Dr. Almeroth confirmed this functionality during his testing when a Google Controller installed with the Google Home app was used to add the Nest Hub player named “Kitchen” that was operating in standalone mode to both (1) a first speaker group named “Morning” that includes the “Kitchen” Nest Hub player and the “Master Bedroom” Home Mini player and (2) a second speaker group named “Afternoon” that includes the “Kitchen” Nest Hub player and the “Living Room” Nest Audio player, as shown in the screenshots to the right. See Almeroth Decl., at ¶ 58.



Thus, the evidence confirms each Accused Google Player meets claim limitations 1.5-1.7.

6. Limitation 1.8

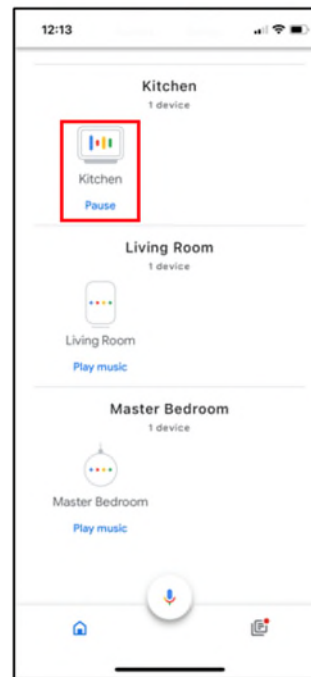
Limitation 1.8 recites “after receiving the first and second indications, continuing to operate in the standalone mode until a given one of the first and second zone scenes has been selected for

1 invocation.”¹⁰ Each Accused Google Player has the functional capability required by limitation
 2 1.8. Each Accused Google Player is programmed such that, if it is operating in “standalone mode”
 3 when it receives first and second “join_group” messages (the claimed “first and second
 4 indications”) for newly-created first and second speaker groups (the claimed “first and second zone
 5 scenes”), the Accused Google Player will continue to operate in standalone mode *after* receiving
 6 the “join_group” messages, as explained above for limitations 1.5-1.7. In other words, the receipt
 7 of these “join_group” messages will *not* cause the Accused Google Player to begin operating as
 8 part of either the first or second speaker group (or any other previously-saved speaker group in the
 9 system). *See, e.g.*, Ex. G, at GOOG-SONOSWDTX-00048962-65 (explaining that an Accused
 10 Google Players updates its “prefs file” when it receives a “join_group” message but does not begin
 11 operating as part of that speaker group unless and until a “launch request” for the speaker group is
 12 received); Ex. F, at GOOG-SONOSWDTX-00040384-89 (describing the separate processes for
 13 “[c]reating/configuring a group” and then subsequently “[c]asting to a group” that has previously
 14 been created in order to invoke that speaker group); Ex. P, at GOOG-SONOSWDTX-00048802
 15 (explaining that each Cast receiver device “can be a member of more than one group” and that
 16 “[e]ven if a device is part of a group(s) it will still be available for casting as a standalone device”);
 17 Almeroth Decl., at ¶ 129-135. The Accused Google Player will not transition to operating in
 18 accordance with either speaker group unless and until one of the speaker groups is subsequently
 19 selected for launch via a Google Controller, as explained further below for limitations 1.9-1.10.

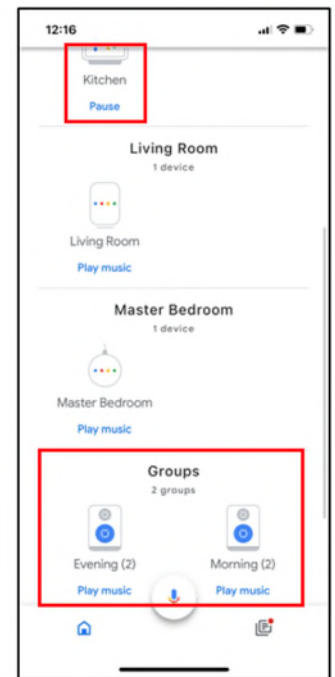
20
21
22
23
24
25
26
27
28 ¹⁰ Neither party has asserted a construction of any term included in limitation 1.8 other than “zone
 player” and “zone scene,” which have already been addressed.

1 This functionality was also confirmed
 2 during Dr. Almeroth's testing. As shown in
 3 the Google Home app screenshots on the
 4 right, the Kitchen player continued engaging
 5 in active, individual playback while in
 6 standalone mode from the time *before* the
 7 "Morning" and "Afternoon" groups were
 8 created (left screenshot), until *after* these
 9 groups were created (right screenshot). See
 10 Almeroth Decl., at ¶ 57. This is clear from
 11 the fact that, both before and after the groups
 12 were created, the "Pause" playback button

Before Groups Created



After Groups Created



13 was presented below the "Kitchen" player (indicating that the "Kitchen" player was actively
 14 engaging in playback and could be paused), while a "Play music" button was presented below the
 15 other players (indicating that the "Living Room" and "Master Bedroom" players were not actively
 16 engaging in playback but that a user could start playing audio on those players if desired).
 17 Additionally, after the groups were created, icons were presented for each of the "Morning" and
 18 "Afternoon" groups along with a respective "Play music" button (indicating that a user could select
 19 either group for **launch** if desired). Further, during this testing scenario, Dr. Almeroth audibly
 20 observed *only* the "Kitchen" player outputting audio both before and after the groups were created.
 21 *Id.*

22 Thus, the evidence confirms each Accused Google Player meets claim limitation 1.8.

23 7. Limitation 1.9

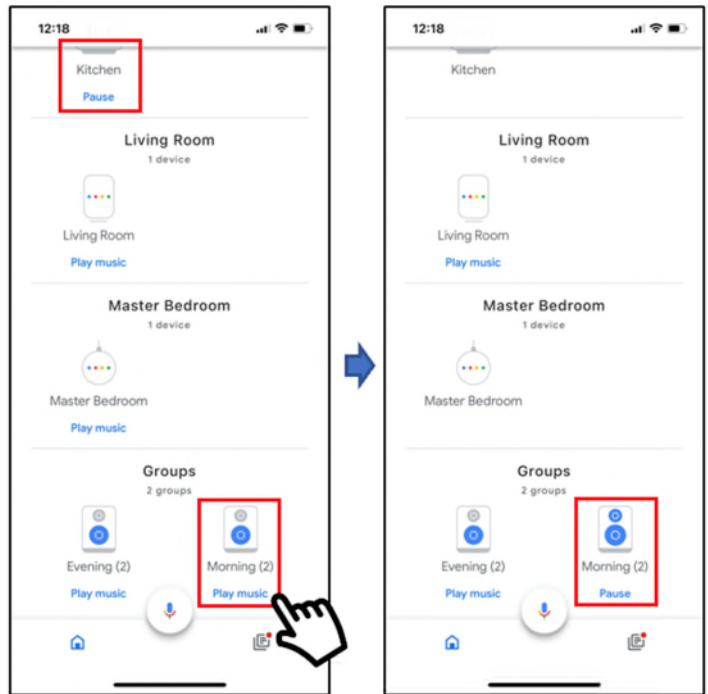
24 Limitation 1.9 recites "after the given one of the first and second zone scenes has been
 25 selected for invocation, receiving, from the network device over the data network, an instruction to
 26 operate in accordance with a given one of the first and second zone scenes respectively comprising
 27
 28

a given one of the first and second predefined groupings of zone players.”¹¹ Each Accused Google Player has the functional capability required by limitation 1.9. For instance, after a speaker group is selected for **launch** at a Google Controller, the Google Controller sends a **“launch” message** over Wi-Fi to at least one Accused Google Player within the group that instructs the at least one Accused Google Player to begin operating in accordance with the selected speaker group. *See* Almeroth Decl., at ¶ 139. Correspondingly, in order facilitate this group **launch** functionality, each Accused Google Player is programmed to receive a **“launch” message** (the claimed “instruction”) from a Google Controller (the claimed “network device”) over Wi-Fi that instructs the Accused Google Player to begin operating in accordance with a given one of two different speaker groups (the claimed “first and second zone scenes”) that each include the Accused Google Player. *See, e.g.,* Ex. B, at 9-10 (Google explaining that “[a] launch request is one of the messages that a leader may receive at the time that a Cast session is launched with a group,” and that “when a group launch request is received, the leader may send a launch notification to all followers over the TCP control channel” and the “leader” and “follower” may then carry out actions to begin actively operating as part of the launched group); Ex. G, at GOOG-SONOSWDTX-00048964-65 (explaining that when a speaker group is invoked, “a LAUNCH request is received on a group-specific transport port” of an Accused Google Player); Ex. F, at GOOG-SONOSWDTX-00040388, 92 (explaining that “[w]hen a group cast is launched,” an Accused Google Player designated as the “leader” of the launched group receives a “launch request” for the group); Almeroth Decl., at ¶ 136-147.

There are numerous ways in which a user can select a speaker group for **launch** and thereby cause a **“launch” message** to be sent from a Google Controller to an Accused Google Player in the group instructing the Accused Google Player to operate in accordance with the group for synchronous playback. For example, as shown in the screenshots below from Dr Almeroth’s testing, a user can select the “Morning” group from the main page of the Google Home app by selecting the corresponding “Play music” button, which causes a **“launch” message**

¹¹ Neither party has asserted a construction of any term included in limitation 1.9 other than “zone player” and “zone scene,” which have already been addressed.

to be sent and the players in the “Morning” group to be configured to output audio in synchrony. See Almeroth Decl., at ¶ 61. Alternatively, as explained and/or shown in Dr. Almeroth’s Declaration, a user can select a speaker group for **launch** via the list of available devices in a Cast menu presented by the Google Play Music app and the YouTube Music app. Id. at ¶ 34, 62-63. In other words, a user can create one or more speaker groups via the Google Home app and then later select one of the speaker groups for **launch** via the Google Home app or via another Cast-enabled app.



Thus, the evidence confirms each Accused Google Player meets claim limitation 1.9.

8. Limitation 1.10

Limitation 1.10 recites:

[B]ased on the instruction, transitioning from operating in the standalone mode to operating in accordance with the given one of the first and second predefined groupings of zone players such that the first zone player is configured to coordinate with at least one other zone player in the given one of the first and second predefined groupings of zone players over a data network in order to output media in synchrony with output of media by the at least one other zone player in the given one of the first and second predefined groupings of zone players.¹²

Each Accused Google Player is programmed with this functional capability. As discussed above for limitation 1.9, each Accused Google Player is programmed with the capability to receive a **“launch” message** (the claimed “instruction”) from a Google Controller over Wi-Fi that instructs the Accused Google Player to begin operating in accordance with a given one of two different speaker groups (the claimed “first and second predefined groupings of zone players”) that each

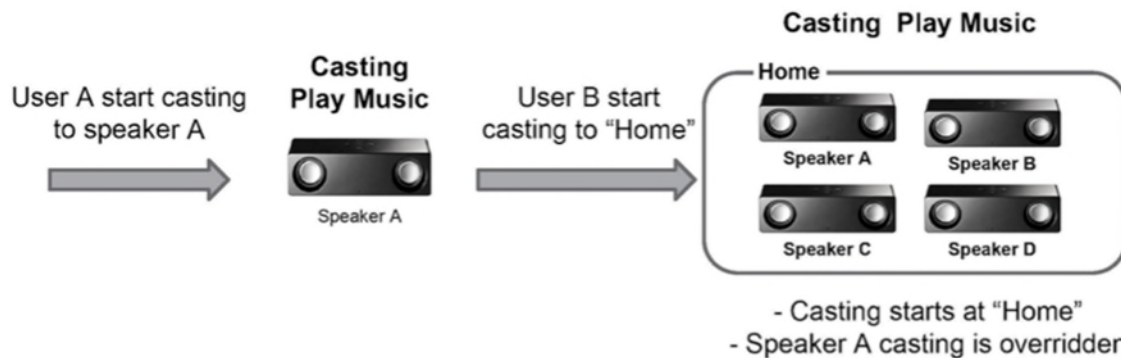
¹² Neither party has asserted a construction of any term included in limitation 1.10 other than “zone player” and “zone scene,” which have already been addressed.

1 include the Accused Google Player. The evidence also shows that, in response to receiving such a
 2 “launch” message for the given speaker group, the Accused Google Player transitions from its
 3 current operating mode it to a grouped mode in which the Accused Google Player is configured to
 4 coordinate with at least one other Accused Google Player in the group over Wi-Fi in order to output
 5 audio in synchrony with output of audio by the other player. Ex. G, at GOOG-SONOSWDTX-
 6 00048964-65 (showing that when “a LAUNCH request is received on a group-specific transport
 7 port,” an Accused Google Player begins to operate in accordance with the speaker group that has
 8 been selected for launch); Ex. E, at GOOG-SONOSWDTX-00007068 (explaining that a Google
 9 speaker group allows a user to “[g]roup any combination of Google Nest or Home speakers and
 10 displays and Chromecast devices together for synchronous music throughout the home”); Ex. F, at
 11 GOOG-SONOSWDTX-00040385, 88-89 (stating that “[t]he primary goal of multiroom audio is to
 12 play out the audio in sync across all the devices in a group”); Almeroth Decl., at ¶ 148-161.

13 This coordination between the Accused Google Player that received the “launch” message
 14 and the other Accused Google Player in the speaker group involves at least (i) exchanging “clock
 15 sync” messages with each “follower” of the speaker group that enables determination of a “clock
 16 offset” between the “leader” and the “follower” and (ii) generating and transmitting audio frames
 17 with associated “timestamps” to each follower. See, e.g., Ex. F, at GOOG-SONOSWDTX-
 18 00040388-91 (describing the coordination between a “leader” of a launched speaker group and each
 19 follower of the launched speaker group); Almeroth Decl., at ¶ 154-159.

20 Consequently, if the Accused Google Player is operating in a “standalone mode” when it
 21 receives a “launch” message for a speaker group, the Accused Google Player will transition from
 22 (i) operating in the “standalone mode” to (ii) operating in accordance with the given speaker group
 23 such that the Accused Google Player is configured to coordinate with at least one other Accused
 24 Google Player in the given speaker group over Wi-Fi in order to output audio in synchrony with
 25 output of audio by the at least one other Accused Google Player.

26 This functionality of transitioning from standalone mode to grouped mode in response to
 27 receiving a “launch” message is illustrated in Google’s “Cast for Audio” specification, which
 28 includes the following diagram:



Ex. I, at GOOG-SONOSNDCA-00056761. As shown, a “Cast receiver,” such as an Accused Google Player, labeled “Speaker A” transitions from operating in a standalone mode to operating in accordance with a previously-saved “Home” speaker group based on an instruction to start “casting” to that “Home” speaker group, which causes Speaker A to become configured to coordinate with at least one of the other Cast receivers in the “Home” speaker group over a Wi-Fi network in order to output audio in synchrony with output of audio by the other Cast receivers. *See also id.* at 38 (defining a “Multi-Zone Group[]” as a “[g]roup of devices playing the same audio content synchronously).

As with the other functional claim limitations, Dr. Almeroth’s testing also confirmed the functionality required by limitation 1.10. For example, as shown in the Google Home app screenshots included above in connection with limitation 1.9, after the “Morning” group was selected for **launch** via the corresponding “Play music” button, the “Kitchen” player transitioned from actively engaging in individual playback in standalone mode to operating in accordance with the Morning group for synchronous audio playback with the “Master Bedroom” player. *See Almeroth Decl.*, at ¶ 61. Dr. Almeroth visually observed this transition by noting that after selecting the “Play music” button corresponding to the Morning group, the “Play music” button was replaced with a “Pause” button, indicating that the Morning group was now actively engaging in synchronous playback and could be paused if desired. *Id.* Dr. Almeroth also audibly observed this transition by noting that, prior to invoking playback on the Morning group, sound was only being output by the Kitchen player; however, after invoking playback on the “Morning” group, sound was being output by both the Kitchen and Master Bedroom players in synchrony. *Id.* at ¶ 57, 65.

Thus, the evidence confirms each Accused Google Player meets claim limitation 1.10.

C. Google Has Committed Acts of Direct Infringement in the United States

Google has committed acts of direct infringement under 35 U.S. Code § 271(a). For example, Google's financials show that Google has sold each of the Accused Google Players in the United States. See Ex. Q, at GOOG-SONOSNDCA-00055305 (indicating that Google sold 5,419,499 Accused Google Players in the United States from 2021Q1-2021Q3).

V. CONCLUSION

The Court should find that Google directly infringes Claim 1 of the '885 Patent and grant Sonos's motion for summary judgment of infringement.

Dated: April 14, 2022

By: /s/ Alyssa Caridis

CLEMENT SETH ROBERTS
BAS DE BLANK
ALYSSA CARIDIS
EVAN D. BREWER

ORRICK, HERRINGTON & SUTCLIFFE LLP

SEAN M. SULLIVAN
COLE B. RICHTER

LEE SULLIVAN SHEA & SMITH LLP

Attorneys for Sonos, Inc.